

ABSTRACT

A method and apparatus for deshuffling received shuffled data in a communication system supporting multi-level modulation. A transmitter encodes information bits and shuffles code symbols so that systematic symbols having a relatively high priority are disposed at high-transmission reliability positions and parity symbols having a relatively low priority are disposed at low-transmission reliability positions in a modulation symbol. A receiver demodulates received data and outputs a modulation symbol having a plurality of code symbols, stores the code symbols separately as systematic symbols and parity symbols in corresponding memory areas according to a deshuffling order corresponding to the shuffling, reads the stored code symbols, decodes the stored code symbols at a predetermined code rate, and thus outputs an packet.